



Gerber 220 Easy Apply, manufactured by 3M™

Feature	Benefit
EDGE READY™ Manufactured by 3M and converted by Gerber for use with GerberColor™ Foils and the GERBER EDGE®.	<ul style="list-style-type: none"> ◆ Optimal printing results means less wasted material and greater profits. Superior finished product translates into repeat business.
Precision punched	<ul style="list-style-type: none"> ◆ Precise punch pattern provides outstanding print registration with the EDGE and perfect tracking through Gerber plotters. This means less wasted material, greater productivity and increased profits.
Wide application temperature range	<ul style="list-style-type: none"> ◆ Eases installation.
Pressure activated adhesive repositionable with air release channels	<ul style="list-style-type: none"> ◆ Simplifies application of large graphics.
Conformability	<ul style="list-style-type: none"> ◆ Apply to vehicle surfaces with rivets and corrugations. Vehicle markings are an excellent market opportunity for EDGE owners. These designs are quality advertising and can lead to other opportunities with the same customer.

Gerber 220 Easy Apply is a user-friendly vinyl. Its versatility and repositionable adhesive allow for simple application to large substrates. Gerber 220 Easy Apply is the ideal vinyl for large-format, multi-paneled vehicle applications.

NUMBER OF COLORS	1, white
PERFORMANCE LIFE (UNPRINTED)	Up to 10 years
MINIMUM APPLICATION TEMP	50°F (10°C) to 100° F (38°C)
THICKNESS	2 mil
LENGTHS AVAILABLE	10 and 50 yards rolls

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Category: EDGE Ready™ FastFact #: 5522 Supplied by: Technical Hardware Support / SB Last Modified:11/27/18



Gerber High Performance Series 220 Premium Film manufactured by 3M

Feature	Benefit
EDGE READY™ Custom formulated for Gerber by 3M. Converted by Gerber for use with GerberColor™ Foils and the GERBER EDGE®.	◆ Optimal printing results means less wasted material and greater profits. Superior finished product translates into repeat business.
Precision punched.	◆ Precise punch pattern provides outstanding print registration with the EDGE and perfect tracking through Gerber plotters. This means less wasted material, greater productivity and increased profits.
90 popular colors	◆ The range of colors will allow the EDGE owner to meet their customer's specific color requests. This can mean more opportunities and more profits.
PANTONE® simulated colors	◆ 20 popular colors of Gerber HP Series 220 now have PANTONE simulated color matches making it easier to meet customer requirements for fleet, corporate, architectural and ad agency specifications. (See the chart on the next page for details.)
Conformability	◆ Apply to vehicle surfaces with rivets or corrugations. Vehicle markings are an excellent market opportunity for EDGE owners. These designs are quality advertising and can lead to other opportunities with the same customer.
Available as Clear	◆ Clear vinyl that can be printed forward or reverse printed for second surface application.

Gerber HP Series 220 sets the industry standard for vinyl performance. Applications include vehicles, window displays, labels, decals, and signs of all kinds. Long life, vivid colors, and outstanding EDGE print results can be expected from this 2 mil cast vinyl.

Number of colors	90
Performance Life (Unprinted)	8 years vehicles and 7 years signs
Minimum application temp	40°F (4°C)
Thickness	2-mil

Lengths Available	10 and 50 yard rolls
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PANTONE® Simulated Color Reference Table		
PANTONE Simulated Color	Gerber HP Series 220 Color Name	GSP Pigment Code
Neutral Black C	BLACK	220-12
Orange 021 C	BRIGHT ORANGE	220-14
Black C	MATTE BLACK	220-22
116C	BRIGHT YELLOW	220-15
7595C	RUSSET BROWN	220-29
485C	WARM RED	220-253
199C	PERFECT MATCH RED	220-263
220C	RASPBERRY	220-133
7713C	TEAL	220-96
323C	BERMUDA BLUE	220-357
7725C	BRIGHT GREEN	220-186
421C	MEDIUM GREY	220-31
872C	GOLD - Metallic	220-131
877C	SILVER - Metallic	220-120
7549C	SUNFLOWER	220-25
711C	TOMATO RED	220-13
533C	NAVY	220-27
3305C	FOREST GREEN	220-66
4625C	DEEP MAHOGANY BROWN	220-19
7563C	IMITATION GOLD	220-105

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Category: EDGE Ready™

FastFact #:5517

Supplied by: Aftermarkets

Last Modified: 6/9/2021



Gerber 220 Easy Apply, manufactured by 3M™

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DESCRIPTION

Gerber 220 Easy Apply, manufactured by 3M is the latest film technology. The improved air release channels allow air escape through micro-replicated channels under the film's surface without leaving any noticeable channel marks on the film surface itself. The result is a smooth, glossy graphic film that is faster and easier to apply than conventional films.

This 2-mil repositionable film is EDGE READY™.

Approved by the AAP Equipment Engineering Committee under AAP Specification M-947

INTENDED APPLICATIONS

Gerber 220 Easy Apply is ideal for both small and large graphics over corrugated and riveted surfaces such as tractor trailers, buses, and other fleet graphic applications. This film can be used on a wide variety of substrates including ABS resins, aluminum, chrome, glass, fiberglass reinforced plastics, painted surfaces and flat or simple curved surfaces, with and without rivets. This film has a grey-pigmented, pressure-sensitive adhesive, which allows for optimum color opacity.

This film is not recommended for use on stainless steel, non-3M films, or substrates that do not have a clean, smooth surface or have poor paint-to-substrate adhesion. It is also not intended for applications where petrochemical contact may occur. If petrochemical exposure is anticipated, refer to the section below on protecting graphics.

PERFORMANCE LIFE (UNPRINTED)

When applied vertically, Gerber 220 Easy Apply has an expected performance life of up to ten years.

Performance statements are based upon field experience and exposure tests conducted throughout the United States. Substrate selection, exposure angle, environmental conditions, and maintenance of

markings will affect actual performance. Continuous exposure in regions that experience maximum sunny days will result in decreased performance.

SHELF LIFE AND STORAGE

Apply Gerber 220 Easy Apply within one year of receipt. Printed graphics should also be applied within one year. Film and printed graphics (with or without premask) should be kept in a clean area free from excessive moisture and direct sunlight. Maintain temperature at less than 100°F (38°C).

Use a paper interleaf between layers of stacked or rolled printed materials. Do not stack printed graphics face to face.

PRINTING

GerberColor Spot (GCS), Process Pro™ CMYK (GCP), Medal (GCM), and Transparent (GCT) Series Foils can be used to print onto Gerber 220 Easy Apply. (For information on the performance lives of GerberColor™ Foils, refer to the appropriate GerberColor Product Bulletin.)

Recommended working environment is as follows:

- Operating temperature: 50°F to 95°F / 10°C to 35°C
- Recommended temperature for assured printing accuracy: 68°F to 78°F / 20°C to 26°C
- Operating humidity: 20% to 90% relative humidity, non-condensing (maximum range; actual range varies by material used)

PROTECTING GRAPHICS

Gerber Technology offers products that are designed to protect vinyl and printed graphics.

Gerber Guard™ manufactured by 3M is a durable, dimensionally stable, glossy vinyl overlamine. This film has a petrochemical-resistant construction and is intended to be used when markings may be exposed to petrochemical spillage and/or severe handling conditions.

Gerber UVGuard™ is a custom-formulated, 1-mil, clear, extremely durable polyvinyl fluoride (PVF) laminating film designed to further expand the resistance to weathering of printed graphics for up to five years.

Gerber UVGuard™ 9 manufactured by 3M is a 2-mil, glossy, clear, mildew-resistant, polyvinyl fluoride laminating film with a petrochemical-resistant adhesive system. It is designed to further expand the resistance to weathering of printed graphics up to nine years. Gerber UVGuard 9 has the highest protection from UV fade.

Gerber StrikeGuard™ is an 8.0-mil, clear, glossy overlamine film designed for a variety of applications. This heavy-duty overlamine film is ideal for the protection of graphics, up to two years, and is especially beneficial where printed graphics experience severe handling and forceful impact. Gerber StrikeGuard is not recommended in applications that require petrochemical protection or where additional UV or vandal resistance is desired.

Abrasion Guard™ SPF (Sign Protection Formula) is a clear, top-coat GerberColor Finishing Series (GCF) Foil designed for use with EDGE® Series thermal transfer printing systems, to protect graphics from moderate contact and exposure to harmful effects of UV rays. It has an expected performance life of up to five years (when printed by itself). When applied as a protective overprint on other GerberColor Foils, Abrasion Guard SPF will extend the life of the base color by up to 30%.

CUTTING

Gerber 220 Easy Apply can be cut on any 15-inch Gerber plotter. A 30° SuperSharp blade is recommended. Though plotters can be set to full speed for simple geometric shapes and panels over 6 inches high, slowing the speed of the plotter is found to optimize cut performance. User is advised to test cut before running entire job. This product is not recommended for complex contour cutting.

SUBSTRATE PREPARATION

Before applying your graphic, wash the surface of your substrate with warm water and detergent. Do not use soaps or other cleaners with lotions or creams as they will leave a residue. Thoroughly rinse the surface and allow it to completely dry.

Saturate a clean paper towel with a solvent-based cleaner and wipe the substrate surface. Be certain to follow all manufacturer safety guidelines when using any solvent. Dry the surface with a lint-free paper towel before the solvent evaporates.

If applying to glass, wipe the surface with a 2 to 1 mixture of water and isopropyl alcohol. Glass temperatures can vary across the surface. These temperature variations can produce stresses which may cause the glass to break. Use caution when applying to glass.

Some polycarbonate substrates may weaken when certain vinyl films are applied to them. Because of this possibility, the user will need to determine if safety items such as helmets, safety shields, and some windshields are compatible with their vinyl's adhesive.

Many paint systems (e.g. two-part urethane) and some polycarbonate substrates will outgas if they are not fully cured. Outgassing can cause permanent bubbling in most films; substrates should be tested for outgassing prior to final application.

Gerber 220 Easy Apply can be removed with heat or chemicals within 7 years. Be certain to follow all manufacturer safety guidelines when using heating devices or chemical solvents.

APPLICATION TECHNIQUES

Dry application should be used with Gerber 220 Easy Apply. Panels can be overlapped. Graphics should be allowed to cure for 15 minutes prior to application.

IMPORTANT – PLEASE READ

Gerber standard tack application tape is required for all graphics produced with Gerber Digital Color Printing Systems. Due to the unique adhesive construction of Gerber 220 Easy Apply, application tape can sometimes curl if exposed to the liner for prolonged periods of time. Therefore, to minimize contact between application tape and the liner, we suggest any of the following options for graphic application:

OPTION #1: Apply application tape immediately prior to installing graphic

OPTION #2: Trim excess application tape from graphic to reduce exposure to liner.

OPTION #3: If transporting graphic, secure the applied application tape to the back of the material liner with masking tape.

MAINTENANCE

To clean printed graphics, use a mild, non-abrasive soap with a soft cloth or sponge. Avoid using alcohol-based cleansers or soaps containing grit or abrasives. Automated vehicle washing systems that use rotary cleaning brushes should also be avoided.

PHYSICAL PROPERTIES

Thickness	2 mil
Adhesive	Pressure activated, repositionable with air release channels
Adhesive Color	Grey
Liner	Polyethylene-coated paper
Tensile Strength	5 lb/in minimum at 73°F (0.9 kg/cm minimum at 23°C)
Dimensional Stability	.0015 in (0.4 mm)
Application Temperatures: Flat Surfaces (with and without rivets) Corrugated Surfaces	50°F to 100°F (10°C to 38°C) 50°F to 100°F (10°C to 38°C)
Removal Temperature	50°F (10°C) minimum (air and substrate)
Operating Temperature	-65°F to 225° F (-54°C to 107°C)

CHEMICAL RESISTANCE

Gerber 220 Easy Apply is resistant to mild acids, mild alkalis and salts. Film has excellent water resistance.

RELATED LITERATURE

Refer to Product Bulletins of relevant foils and materials for product-specific handling, production, and finishing information.

CONTACT INFORMATION

For help with questions concerning Gerber products, please call your distributor or Gerber Customer Service at 1-800-222-7446 or (860) 644-1551. Visit us on the Internet at www.gerbertechnology.com/signage to learn more about our many other foils, materials and equipment.

When sold by Gerber, use only the corresponding Gerber Product Bulletin to determine product details, including but not limited to appropriate uses, warranty and processing.

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Category: EDGE READY™ FastFact #: 5572 Supplied by: Aftermarkets Last Modified: 04/26/21

HP220 Unpunched Vinyl Takes Off

You've heard that applications for Gerber High Performance (HP) 24 & 48-inch vinyls are limited only by your imagination. The imagination of Joel "Smiley" Freeland of Delta Airlines was sparked by Gerber 48-inch unpunched vinyl when he was tasked to design an historic graphic—the logo which is riding high on a 757 to celebrate the career of Yankee Pitcher Mariano Rivera.

In July, the New York Yankees pitcher was honored with a Delta plane dedication at New York's JFK International Airport. The Delta Air Lines 757 aircraft features a seven-foot graphic with Rivera's NY Yankees No. 42 jersey and his signature. The ceremony represented the first time ever that Delta had dedicated an aircraft in New York. Even more significant, Delta executive Gail Grimmett reported that she can count on one hand the number of times in the past ten years that the company has dedicated an aircraft to an individual.

The fact that the first plane goes to Rivera is no surprise to Freeland. "Mariano Rivera is such a great player, and he's retiring at the end of the season," points out Freeland. Delta recognizes several sports teams every year, and Joel has grown accustomed to exciting rush jobs for high-profile clients. But the Rivera graphic is different. "This one's super-special; so many of our graphics are for one-run flights. This one will fly 'til the end of October." So keep your eyes on the sky!

Although the Delta graphic will be installed for just a few months, Gerber 220 vinyl is designed to last for many years. Gerber HP 220 vinyl is recognized for its durability, color consistency, and exceptional performance over a range of environments. It is the vinyl of choice for applications which range from vehicle graphics to labels & decals, sports & recreation equipment, and industrial signage of all varieties.

All set to take off! The Mariano Rivera graphic on the Delta 757 will remain installed through October.





Joel "Smiley" Freeland.

Throughout his 22-year career in technical airline graphics, Joel has helped develop designs for all kinds of special initiatives. His first big project was the Spirit of Delta for the Atlanta Olympics. "Each special event calls for new livery," Freeland explains, who hastens to add that bringing a design to life in the airline industry has one or two special challenges. "Designers & marketing folks come up with great concepts, but we have to bring them to life. I have fun at my job as the liaison between marketing & implementation—I'm the bridge between two worlds," he adds. "When you are dealing with airplanes, **everything**—including exterior graphics—is highly regulated. Technical documentation is required before you can install any graphics on an airplane, and it's a super-exact process. That means our designs need to be super-exact, too."

According to Freeland, that's another place where Gerber comes in. "Gerber gives me all the tools to work in any environment. All designs need to be full-scale for the review process. That's just one reason I love OMEGA—no design limitations. The 1:1 scale factor is HUGE: literally and figuratively!"

The turn-around for the River graphic was ultra-quick. "I'd planned to take off a couple of days to visit with the grandkids, but to do that, I had to rush the design to get approval through the technical group. I was pretty chagrined when I realized that there wouldn't be enough time to digitally print a graphic." That's when Freeland realized that Yankee blue was one of the colors in Gerber's expanded 54-color range for 24/48-inch. In Freeland's words, "Gerber was a lifesaver. Honestly, without Gerber I would have struggled to finish this project on time."



NY Yankees Manager Joe Girardi and Pitcher Mariano Rivera



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Gerber High Performance Series 220 Premium Film manufactured by 3M

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DESCRIPTION

Gerber High Performance Series 220 is a high performance cast vinyl film made exclusively for Gerber by 3M. Gerber High Performance Series 220 is a durable, dimensionally stable vinyl with a clear, pressure-sensitive adhesive designed to withstand a variety of severe weather and handling conditions. It is available in over 100 colors and several finishes including, opaque gloss, matte, metallic, and clear in both punched and unpunched formats. Series 220 comes on a paper liner.

15-inch Series 220 is an EDGE READY™ Material.

Approved by the AAP Equipment Engineering Committee under AAP Specification M-947

Property	Description
Film	2-mil cast vinyl
Thickness (film and adhesive)	2.5 to 3.5 mil (0.063 to 0.09 mm)
Film Color	Over 100 colors

Property	Description
Adhesive	Clear, pressure sensitive
Liner	78-lb white kraft liner
Application substrates	For flat surfaces with and without rivets, or simple curved surfaces
Application surfaces	Flexible signage, glass, metal, acrylic, polycarbonates, fiberglass, painted surfaces
Removability	Permanent

INTENDED APPLICATIONS

Series 220 is suitable for a wide range of commercial and industrial applications including vehicles, exterior and interior signage, window markings, display graphics, etc. It can be used on flat surfaces with and without rivets or simple curved surfaces. Series 220 has a clear adhesive and is therefore suitable for use as a cut vinyl in window/transparent substrate applications, as well as opaque applications.

PERFORMANCE LIFE (UNPRINTED)

The exterior performance life of Gerber High Performance Series 220 is based upon field experience and exposure tests conducted throughout the United States. When the graphics are processed and used according to Gerber recommendations, they should have an expected performance life up to the values shown in the charts that follow. The actual performance depends on the following conditions:

- Selection and preparation of substrate
- Application methods
- Exposure conditions
- Cleaning methods

Application Specifics			Performance Life (years): Unprinted	
			U.S. ^{1,4}	S. W. ^{2,4}
*Vertical Exposure	Signs Only Solid colors, except metallic colors and clear	Unprinted, applied to first surface	7	5
		Unprinted, applied to second surface	7	5
	Vehicles Only Solid colors, except metallic colors and clear	Unprinted, applied to first surface	8	5
		Unprinted, applied to second surface	8	5
	Signs and Vehicles Metallic colors and Clear	Unprinted, applied to first surface	5	3

Application Specifics		Performance Life (years): Unprinted	
		U.S. ^{1, 4}	S. W. ^{2, 4}
**Non-Vertical Exposure³	Unprinted, applied to first surface	5	Not Recommended

*Face of graphic is vertical 90° ± 10°.

**Face of graphic is more than 10° from 90°. Solid colors only.

1 For exterior performance life statement outside of the United States, contact Gerber Scientific Products, Inc.

2 The United States Desert Southwest area includes Arizona, New Mexico, and the desert areas of California, Nevada, Utah, and Texas. A detailed map is available upon request.

3 Non-vertical applications can be used to identify commercial vehicles from the air. Non-vertical applications expose the film to the maximum effect from sunlight and the environment. There are foil and film restrictions for horizontal applications. The film may change color, lose gloss, and chalk. The following performance statements assume that only legibility is required.

4 Unprinted films 220-20, 220-163, 220-263, 220-273, and 220-286 may chalk with age (Matte White, Dark Magenta, Perfect Match Red, Process Magenta, and Jade Green). This is considered normal and acceptable wear.

SHELF LIFE AND STORAGE

Apply film within one year of receipt. Printed graphics should also be applied within one year. Film and printed graphics (with or without premask) should be kept in a clean area free from excessive moisture and direct sunlight. Maintain temperature at less than 100°F (38°C).

Use a paper interleaf between layers of stacked or rolled printed materials. Do not stack printed graphics face to face.

PRINTING

Use Gerber Series 220 settings when printing with the GERBER EDGE®, GERBER EDGE 2®, or GERBER EDGE FX™ thermal transfer printing systems.

GerberColor™ Finishing (GCF), GerberColor Spot (GCS), GerberColor Process Pro™ CMYK (GCP), GerberColor Medal (GCM), GerberColor Transparent (GCT), and GerberColor Special Effects (GCX) Series Foils, and ColorSet™ Foils can be used to print onto Series 220.

Gerber standard tack application tape is required to be used as the transfer carrier for all printed graphics.

Recommended working environment is as follows:

- Operating temperature: 50°F to 95°F / 10°C to 35°C
- Recommended temperature for assured printing accuracy: 68°F to 78°F / 20°C to 26°C
- Operating humidity: 20% to 90% relative humidity, non-condensing (maximum range; actual range varies by material used)

PROTECTING GRAPHICS

Gerber Technology offers products that are designed to protect vinyl and printed graphics.

Gerber Guard™ manufactured by 3M is a durable, dimensionally stable, glossy vinyl overlamine. This film has a petrochemical-resistant construction and is intended to be used when markings may be exposed to petrochemical spillage and/or severe handling conditions.

Gerber UVGuard™ is a custom-formulated, 1-mil, clear, extremely durable polyvinyl fluoride (PVF) laminating film designed to further expand the resistance to weathering of printed graphics for up to five years.

Gerber UVGuard™ 9 manufactured by 3M is a 2-mil, glossy, clear, mildew-resistant, polyvinyl fluoride laminating film with a petrochemical-resistant adhesive system. It is designed to further expand the resistance to weathering of printed graphics up to nine years. Gerber UVGuard 9 has the highest protection from UV fade.

Gerber StrikeGuard™ is an 8.0-mil, clear, glossy overlamine film designed for a variety of applications. This heavy-duty overlamine film is ideal for the protection of graphics, up to two years, and is especially beneficial where printed graphics experience severe handling and forceful impact. Gerber StrikeGuard is not recommended in applications that require petrochemical protection or where additional UV or vandal resistance is desired.

Abrasion Guard™ SPF (Sign Protection Formula) is a clear, top-coat GerberColor Finishing Series (GCF) Foil designed for use with EDGE® Series thermal transfer printing systems, to protect graphics from moderate contact and exposure to harmful effects of UV rays. It has an expected performance life of up to five years (when printed by itself). When applied as a protective overprint on other GerberColor Foils, Abrasion Guard SPF will extend the life of the base color by up to 30%.

CUTTING

Series 220 can be cut on any Gerber 15-inch sprocketed plotter, plus any FasTrack™ or ODYSSEY™ plotters. A 30° SuperSharp blade is recommended for tangential plotters (HS15™, HS15 Plus, GSX™, GS15™, GS750™, HS750™, SMIVB™). A 45° blade should be used with swivel knife plotters (FasTrack™, EmbossTrack™, enVision™, and ODYSSEY). Plotters can be set to full speed.

The minimum recommended cutting height for text is .375 inches. This recommendation is based upon evaluations using upper case Helvetica Medium copy. Users should verify their own ideal cut heights based upon their specific cutting equipment. The user should perform a test cut to determine the ideal tool force setting.

Excess film should be weeded within 24 hours of cutting to minimize the effect of adhesive flow.

SUBSTRATE PREPARATION

Before applying your graphic, wash the surface of your substrate with warm water and detergent. Do not use soaps or other cleaners with lotions or creams as they will leave a residue. Thoroughly rinse the surface and allow it to completely dry.

Saturate a clean paper towel with a solvent-based cleaner and wipe the substrate surface. Be certain to follow all manufacturer safety guidelines when using any solvent. Dry the surface with a lint-free paper towel before the solvent evaporates.

If applying to glass, wipe the surface with a 2 to 1 mixture of water and isopropyl alcohol. Glass temperatures can vary across the surface. These temperature variations can produce stresses that may cause the glass to break. Use caution when applying to glass.

Some polycarbonate substrates may weaken when certain vinyl films are applied to them. Because of this possibility, the user will need to determine if safety items such as helmets, safety shields, and some windshields are compatible with their vinyl's adhesive.

Many paint systems (e.g. two-part urethane) and some plastic substrates will outgas if they are not fully cured. Outgassing can cause permanent bubbling in most films; substrates should be tested for outgassing prior to final application. Plastics should be dried at 150°F (66°C) for 24 hours prior to application to help avoid outgassing.

APPLICATION TECHNIQUES

Both wet and dry application methods may be used with Series 220 and panels should be overlapped. Gerber standard tack application tape is recommended for all EDGE-printed applications (see “Printing” section for important information on applying EDGE graphics.)

MAINTENANCE

To clean printed graphics, use a mild, non-abrasive soap with a soft cloth or sponge. Avoid using alcohol-based cleansers or soaps containing grit or abrasives. Automated vehicle washing systems that use rotary cleaning brushes should also be avoided.

PHYSICAL PROPERTIES

Property	English Units	Metric Units
Dimensional Stability	0.008 in	0.2 mm
Tensile Strength	5 lb/in at 73°F	0.9 kg/cm at 23°C
Reverse impact resistance	No cracking at 73°F or 40°F	No cracking at 23°C or 4°C
Minimum Application Temperature	40°F	4°C
Service Temperature Range	-40°F to 225°F	-40°C to 107°C

ADHESIVE CHARACTERISTICS

Material	English Units - Pounds/inch	Metric Units - Kg/cm
Acrylic	4	0.7
Acrylic enamel	4	0.7
Alodine aluminum	8	1.4
Chrome plating	5	0.9
Fruehauf prepainted panels	4	0.7
Polycarbonate	4	0.7
Urethane paints	4	0.7

CHEMICAL RESISTANCE

Chemical Agent	Exposure Time	Result
Reference fuel	1 hour	edge softening
#1 diesel fuel	1 hour	edge softening
10% Hydrochloric acid	10 minutes	no effect
10% Ammonium Hydroxide	10 minutes	no effect
Mild acids	10 minutes	no effect
Alkalis	10 minutes	no effect
Salts	10 minutes	no effect
Water	10 minutes	no effect

FLAMMABILITY

Series 220-10 (white) has been tested for flame spread per ASTM E84-95, "Surface Burning Characteristics of Building Materials," and meets the requirements of National Fire Protection Association Class A (1) (most fire resistant class) as defined in NFPA 101, "Life Safety Code."

RELATED LITERATURE

Refer to Product Bulletins of relevant foils and materials for product-specific handling, production, and finishing information.

CONTACT INFORMATION

For help with questions concerning Gerber products, please call your distributor or Gerber Customer Service at 1-800-222-7446 or (860) 644-1551. Visit us on the Internet at www.gerbertechnology.com/signage to learn more about our many other foils, materials and equipment.

When sold by Gerber, use only the corresponding Gerber Product Bulletin to determine product details, including but not limited to appropriate uses, warranty and processing.

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GERBER HP SERIES 220 COLOR CHART

Solid Colors

220-20 Matte White	220-25 Sunflower	220-27 Navy
220-10 White	220-145 Chrome Yellow	220-197 Light Navy
220-90 Antique White	220-105 Imitation Gold	220-127 Boat Blue
220-100 Oyster	220-64 Apricot	220-397 Dark Blue
220-11 Pearl Grey	220-54 Light Orange	220-177 Shadow Blue
220-121 Light Grey	220-14 Bright Orange	220-187 Wedgewood Blue
220-81 Stone Grey	220-134 Intense Orange	220-37 Sapphire Blue
220-31 Medium Grey	220-74 Red Orange	220-17 Vivid Blue
220-61 Mid Grey	220-23 Terra Cotta	220-407 Matte Blue
220-151 Traffic Grey	220-103 Magenta	220-47 Intense Blue
220-91 Dove Grey	220-273 Process Magenta	220-387 Periwinkle
220-41 Dark Grey	220-253 Warm Red	220-117 Persian Blue
220-101 Nimbus Grey	220-263 Perfect Match Red	220-57 Olympic Blue
220-22 Matte Black	220-293 Atomic Red	220-107 Light Blue
220-12 Black	220-13 Tomato Red	220-97 Soft Blue
220-69 Duranodic	220-93 Imperial Red	220-77 Peacock Blue
220-19 Deep Mahog. Brown	220-63 Geranium	220-86 Robin Egg Blue
220-29 Russet Brown	220-53 Cardinal Red	220-347 Powder Blue
220-90 Sandstone	220-283 Cranberry	220-307 Dark Aqua

220-39 Tan	220-58 Burgundy	220-96 Teal
220-49 Beige	220-98 Dark Violet	220-357 Bermuda Blue
220-99 Fawn	220-78 Plum	220-136 Lime Green
220-65 Light Lemon Yellow	220-38 Royal Purple	220-196 Apple Green
220-135 Primrose Yellow	220-48 Purple	220-46 Kelly Green
220-15 Bright Yellow	220-87 Royal Blue	220-186 Bright Green
220-266 Cactus Green	220-56 Dark Green	220-16 Khaki Green
220-66 Forest Green	220-276 Bottle Green	

Metallic Colors

220-227 Bright Blue	220-208 Burgundy	220-131 Gold
220-247 Petroleum Blue	220-209 Dark Brown	220-120 Silver
220-211 Charcoal	220-229 Copper	220-249 Champagne
220-201 Slate		

Clear 220-114 Clear

PANTONE® Simulated Color Reference Table		
PANTONE Simulated Color	Gerber HP Series 220 Color Name	GSP Pigment Code
Process Black C	BLACK	220-12
Orange 021 C	BRIGHT ORANGE	220-14
Cool Gray 2C	PEARL GREY	220-11
Black C	MATTE BLACK	220-22
109C	BRIGHT YELLOW	220-15
175C	RUSSET BROWN	220-29
485C	WARM RED	220-253
186C	PERFECT MATCH RED	220-263
214C	PROCESS MAGENTA	220-273
289C	LIGHT NAVY	220-197
Cool Gray 8C	MEDIUM GREY	220-61
205C	MAGENTA	220-103
525C	PLUM	220-78
2747C	SAPPHIRE BLUE	220-37
298C	PEACOCK BLUE	220-77
3425C	DARK GREEN	220-56

PANTONE Simulated Color	Gerber HP Series 220 Color Name	GSP Pigment Code
301C	INTENSE BLUE	220-47
322C	TEAL	220-96
323C	BERMUDA BLUE	220-357
348C	BRIGHT GREEN	220-186
349C	CACTUS GREEN	220-266
Cool Gray 7	MEDIUM GREY	220-31
872C	GOLD - Metallic	220-131
877C	SILVER - Metallic	220-120
1235C	SUNFLOWER	220-25
1795C	TOMATO RED	220-13
2727C	PERIWINKLE	220-387
2756C	ROYAL BLUE	220-87
2767C	NAVY	220-27
2935C	MATTE BLUE	220-407
2975C	POWDER BLUE	220-347
3302C	FOREST GREEN	220-66
4625C	DEEP MAHOGANY BROWN	220-19
7461C	OLYMPIC BLUE	220-57
7510C	IMITATION GOLD	220-105

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Category: EDGE READY™	FastFact #: 5574	Supplied by: Aftermarkets	Last Modified: 6/9/2021
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